

A syphilitic mother may, of course, begin with miscarriage at the first or second month, pass through progressively longer terms of pregnancy until full term syphilitic offspring issue. Finally, if persistent enough, she may bring forth full-term progeny free from clinical stigmata and serologically negative. It is such a case as this last that is under discussion.

There are three possible ways of meeting the situation, viz.: first, with direct, active treatment; second, with no treatment at all; third, with a compromise by indirect treatment through the maternal milk. In making a decision, the question largely resolves itself into this: Are we justified in the administration of toxic and potentially harmful substances into the circulation of any subject, adult or infant, on the mere presumption that he is syphilitic? My own view is that treatment should never be undertaken in the absence of both clinical and serologic indications, subject of course to the reservation, in the case of infants, that one is in duty bound to follow the case as closely as possible lest late, hereditary stigmata develop.

In this particular case, even though in the title the authors use the term "a presumably syphilitic child," I do not feel sure that the presumption of syphilis is justified. A subject is or is not syphilitic, and in the absence of both clinical and serologic evidence it does not seem to me that we are warranted in saddling a diagnosis of syphilis upon one even though his mother and "his sisters and his cousins and his aunts" are infected.

With respect to treatment the authors decided upon a middle course and whether the child would, or will, ever develop definite stigmata or positive blood reaction, we shall perhaps never know. It is noteworthy, however, that the physical findings at the end of two years revealed nothing which could be attributed to adverse result of treatment.

It would be interesting if in the treatment of frankly syphilitic infants the results of direct and indirect therapy might be compared not only with respect to serologic and clinical response, but to the general physical condition after two years or more of treatment.

The authors are deserving of praise for a paper rich in thought and philosophical flavor that should prove a stimulus to every one of us.

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H. J. TEMPLETON, M. D. (3115 Webster Street, Oakland).—The authors of this paper have given us considerable food for thought and at the same time have reopened the discussion of an old problem, viz., in regard to the desirability of treating an apparently normal child of a syphilitic mother. This question has been debated in dermatologic circles for many years, but we are still only able to say, as did Omar Khayyam, "and heard great argument, but evermore came out by the same door wherein I went."

The conservative school believes that, just as we never treat an adult for syphilis until a positive diagnosis has been made, we should never treat the child of a syphilitic mother until we can definitely prove that it has the disease. The authors followed this conservative course and their judgment would seem to have been vindicated by the excellent result which they obtained, the child being clinically and serologically well at the age of two years. And yet, one may be permitted to speculate as to what will happen to this child in future years. Stokes has said, "Infants who appear well and perhaps respond negatively to the earlier Wassermann tests may, in later life, under the influence of trauma, lowered resistance, and the onset of puberty, develop active and unmistakable signs of the disease."

It is my belief that no definite rule can be laid down for the treatment or withholding of treatment of the normal baby of a syphilitic mother. Each case must be determined on its individual merits. Thus, if the child has been born many years after the date

of the mother's infection, if her Wassermann is only weakly positive and she presents no clinical evidence of syphilis, and if she has given birth to other apparently normal children, one would be justified in withholding treatment. On the other hand, if the mother's infection is of a comparatively recent date, if her Wassermann is strongly positive, if she presents clinical signs of syphilis and has given birth to syphilitic children, I believe that her baby should be treated regardless of apparent clinical and serologic normality.

In the case which we are discussing, the mother's Wassermann was only weakly positive and she was apparently healthy. These two facts might influence us to withhold therapy. But when we note that every one of her seven previous pregnancies ended disastrously we must stop and ponder. I must confess that had I been confronted with this same problem, I would have regarded the baby as probably syphilitic and would have instituted prolonged treatment with bismuth and sulpharsphenamin.

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DOCTORS CAMPBELL AND FROST (Closing).—With reference to Dr. E. D. Chipman's observation:

We also feel that it would be of interest to utilize this mode of therapy on the frankly syphilitic child. Only in this manner could its value be determined, and while at the outset it would seem a very radical departure, the results of direct medication would appear to warrant it and are, without doubt, a justification for its trial.

One must realize at the outset, however, that this method has its limitations, namely, that the mother must be able to breast-feed the child; she must be able to tolerate the drug, and we would emphasize the necessity of keeping a careful and constant check on the mother during the entire time she is under therapy, stressing that she should report anything untoward that may occur, however slight it may seem. The length of time the mother has to be kept under weekly treatments constituted in our minds the greatest drawback to this mode of therapy. However, this patient tolerated the drug well for some fourteen months, and has been perfectly well ever since. This is a moot question, and to us one which time and experience alone can answer.

PEPTIC ULCER—ITS MANAGEMENT*

REPORT OF CASES

By GRANT H. LANPHERE, M. D.

Los Angeles

DISCUSSION by Frederick A. Speik, M. D., Los Angeles; Henry Snure, M. D., Los Angeles; Paul B. Roen, M. D., Hollywood.

THE management of peptic ulcer depends upon a careful consideration of its probable location, duration and complications.

Ulcers of the stomach and duodenum are fundamentally alike. Such differences as exist are due very largely to the complications peculiar to the stomach and duodenal location of the ulcer.

The cause of ulcers of the stomach and duodenum as they occur clinically has not been satisfactorily established. It is probable that there are many factors which predispose to their formation. Two of the more recent theories are a constitutional predisposition or an irritability of the autonomic nervous system associated with chronic oral sepsis, and foci of infection which are drained by the portal vein.

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SYMPTOMS

The symptomatology of well established ulcer is quite characteristic. The start is usually obscure, due no doubt to the fact that in the beginning and before the ulcer has eroded through the muscular and serous coats and involved the peritoneum, the disturbance is slight.

A detailed account of the distress symptoms as they appear during a usual twenty-four-hour period, is of vast importance. When ulcer is associated with the conditions essential to the production of clinical manifestations, subjective symptoms are often present in such characteristic form that a very probable diagnosis may be made from the clinical history alone.

The following facts are diagnostic of peptic ulcer, providing there are no definite or unexplained incompatibilities:

1. The distress of ulcer is absent when the stomach is normally empty.
2. The distress appears usually from one to three hours, and seldom as late as five hours after eating an ordinary meal. It seldom appears before breakfast unless complications are present.
3. The distress is as a rule completely relieved by food and alkalis.
4. It is associated usually with an adequate free hydrochloric acid content of the stomach. The epigastric distress, which may vary from a feeling of fullness or slight burning to severe pain, appears in attacks, lasting from a few days to a few weeks at one time, and recurring several times a year. During the interval between attacks, the patient is often free from distress. The duration of the ulcer may be from a few months to many years.

DIAGNOSIS

The diagnosis of peptic ulcer should involve a careful consideration of the distress symptoms that have caused the patient to seek relief and careful observation for the purpose of demonstrating the correctness of the clinical facts obtained by the history and physical examination. Thorough search should be made in every case for evidence of the complications and sequelae of ulcer.

Pyloric obstruction, whether due to pylorospasm with acute inflammatory swelling, or dependent on induration and callus formation, is the most common complication of peptic ulcer. Other sequelae of ulcer are hemorrhage, perforation, hourglass stomach, and malignancy. The roentgen ray examinations give the most accurate evidence of the location of ulcer, as well as the presence of its complications.

TREATMENT

Before instituting treatment in a given case of gastric or duodenal ulcer, a careful study should be made of the conditions that attend the ulcer. Whether the patient should be treated medically

or surgically depends upon a careful consideration of the clinical facts, and evidence of the complications of ulcer.

REPORT OF CASES

Pylorospasm with Peptic Ulcer.—The first case is presented to show evidence of pylorospasm. Very frequent causes of this condition, especially in young people are chronic colitis, chronic appendicitis and tubo-ovarian disease. The basic phenomenon underlying the symptomatology of peptic ulcer is pylorospasm.

CASE 1. T. R., a girl twenty years of age, complained of epigastric distress, constipation alternating with diarrhea, attacks of soreness in the region of the appendix and dysmenorrhea. The duration of symptoms was about two years. The important points of the examination were a hyperchlorhydria, occult blood in the feces, tenderness in the epigastrium over the appendix region and the lower right quadrant.

Clinically, peptic ulcer, colitis, and tubo-ovarian disease were evident. Roentgenologic study confirmed evidence of ulcer in the first portion of the duodenum, a considerable retention of gastric residue at the six-hour observation, and a segmented appendix.

Laparotomy was advised and the patient submitted to operation. Appendectomy, right salpingectomy and a cyst removal from the right ovary were done. Adhesions from a periduodenitis with some induration of the first portion of the duodenum were found. After the operation the patient was placed on ulcer management for nonobstructive peptic ulcer, consisting of three ounces of equal parts of milk and cream given each hour from 7 a. m. until 7 p. m. About fifteen to twenty ounces of bland foods were given morning, noon, and night.

Comment.—The control of the free hydrochloric acid is to be maintained from the beginning by means of insoluble alkalis such as calcium carbonate, tribasic calcium phosphate, and calcined magnesia; for excess of these beyond the needs of acid neutralization do not lead to development of free alkali. When such alkalis are employed without soda bicarbonate, alkalemia is decidedly less severe and the clinical symptoms of alkalosis are unlikely to appear, especially if the complication of obstruction or vomiting does not occur.

For the convenience of the patient, the powders are marked numbers one and two. Powder number one consists of calcium carbonate grains ten, and tribasic calcium phosphate grains twenty, given each hour from 7:30 a. m. to 7:30 p. m. Powder number two consists of calcined magnesia and tribasic calcium phosphate each grains ten, as needed or directed in number and as indicated by the consistency of the stool.

Thirty to forty minims of tincture of belladonna are given daily. Special attention and instruction are given to the patient in regard to the treatment of an associated constipation or diarrhea, and to prevent a bowel distress from too much magnesia.

If possible, the patient should remain at rest in bed for three weeks during the initial part of his ulcer management, and a careful study made

for focal infection. Oral sepsis is a very common condition.

Subsequent study of Case 1 by means of the roentgen rays revealed the stomach to function normally and no gastric residue at the six-hour observation. Patient is well and at work.

Management suitable for the obstructive type of ulcer differs from that of the nonobstructive ulcer in the following points:

1. In many cases a larger quantity of powder is required to control the free hydrochloric acid of the day secretion, and powders are given until midnight.

2. The best results are obtained by emptying the stomach at night with the stomach tube one-half hour after the last powder is taken. The greatest stimulus to an excessive night secretion is thereby removed.

Otherwise the management is the same as that used for the treatment of the nonobstructive type of ulcer.

CASES 2 and 3. *Duodenal Ulcer with Partial Pyloric Obstruction*.—G. D. and E. P., two women, one aged forty-six and the other aged thirty-five years respectively, had duodenal ulcers with considerable six-hour retention of gastric residue. Each gave a history of long standing epigastric distress, constipation, and evidence of foci of infection elsewhere in the body. The younger patient had an associated condition of hyperthyroidism, and a fibroid uterus, which was removed previous to the time the patient came for examination. No doubt there was considerable organic change and stenosis of the pylorus in each of these two patients.

They were treated at home, their stomachs aspirated at night. Subsequent study disclosed the deformity caused by duodenal ulcer to be present, but absence of tenderness over the cap, freedom from symptoms, and no retention of gastric residue at the six-hour study.

The prognosis is good in this type of ulcer if the patient will stay accurately on the management for months with frequent observation and supervision. This is the most common type of ulcer in patients between twenty and fifty years of age.

CASE 4. *Duodenal Ulcer with Nearly Complete Pyloric Obstruction*.—P. P., a man sixty-eight years old, had a peptic ulcer for many years with much callus formation and stenosis of the pylorus. The walls of the stomach were dilated, and there was evidence of hyperperistalsis with much gastric residue at six hours. It was possible to see evidence of peristaltic waves through the abdominal wall passing from left to right, and a small tumor in the region of the pylorus could be felt. Due to the fact that he was a poor surgical risk when first seen, the medical treatment of a peptic ulcer that is causing obstruction was given, namely; increase in the amount of each powder, removal of the gastric contents with the stomach tube after the last powder at night, and the routine ulcer management described above. The patient continued medical management for about three months, and because he continued to have nearly complete obstruction, laparotomy was advised, the patient consenting to the operation. Through a midline incision the stomach was noted to be very dilated, and there were adhesions binding the first portion of the duodenum to the pars pylorica. Palpation revealed a dense and

thickened pylorus with narrowed lumen, evidence of healed duodenal ulcer with scar formation. A posterior gastro-enterostomy was done and ulcer management for nonobstructive type of ulcer was given. The patient made an uneventful recovery, which was partly due to his preoperative preparation, and at present is comfortable and gaining in weight.

CASE 5. *Duodenal Ulcer with Complete Pyloric Obstruction*.—W. H., a man fifty-six years old, had a peptic ulcer for many years.

His symptoms were those similar to the patient of sixty-eight years (Case 4). Because he had a hyperchlorhydria, loss of weight, epigastric distress two to three hours after meals, and after midnight, occult blood in the stools, complete obstruction with much retention of gastric residue, laparotomy was advised. A pylorotomy was done. Subsequent to the operation medical treatment for nonobstructive type of peptic ulcer was given. The patient at present is comfortable, has gained in weight, and is at work.

Gastric Ulcer Complicated with Hemorrhage and Obstruction.—Gastric ulcer occurs in a ratio of about one to twelve, as compared to the frequency of duodenal ulcer. The treatment of gastric ulcer usually is that of medical management, especially if the ulcer is a recent one, less than one centimeter in diameter, and associated with a hyperchlorhydria. The treatment may be surgical, as one must be ever mindful of the danger of gastric ulcer undergoing malignant change. If it is a large, old, indurated, calloused ulcer, it is very unlikely that a cure will be effected by medical treatment.

CASE 6. C. P., a man fifty-four years old, gave a history of the classical symptoms of ulcer, just given, of many years duration. This patient had a severe hemorrhage nine years previous. Following this a laparotomy was done and the ulcer was removed from the lesser curvature of the stomach by cauterization. Later another ulcer developed near the pylorus with a return of nausea, gnawing epigastric distress, vomiting, hyperchlorhydria, gastric retention, and occult blood in the stools. Gastro-enterostomy was advised, but just previous to this procedure, before any type of treatment was given, the patient had another severe gastric hemorrhage. He was immediately placed on the medical management for treatment of acute hemorrhage from peptic ulcer, which consisted of the following:

1. Absolute rest in bed.
2. Adequate nursing attention.
3. Morphin sulphate to control restlessness.
4. Hourly doses of alternate powders of calcined magnesia and calcium carbonate in sufficient amounts to control the free hydrochloric acidity from the beginning. These preparations do not produce gas and the magnesia prevents stasis in the colon, of feces, blood, and the precipitated chalk.
5. Blood transfusion, to promote clotting at the site of the hemorrhage and to sustain the patient, may be given.
6. Later, ulcer management was given.

Comment.—In the great majority of patients with ulcer complicated by hemorrhage, the application of medical treatment for acute hemorrhage controls the bleeding, clotting is promoted, the hemorrhage ceases and occult blood rapidly disappears from the stool and does not recur while the patient is on accurate ulcer management.

A gastro-enterostomy was done on this patient, based on the following indications:

(a) A history of two severe attacks of hemorrhage.

(b) Nearly complete obstruction from pyloric stenosis and induration.

(c) No relief from an excessive continued secretion.

After the operation the patient was placed on the treatment of the nonobstructive type of ulcer management to promote the healing of the present ulcer and prevent, if possible, the recurrence of another ulcer. The patient was advised to have evident foci of infection removed. Subsequent roentgen-ray study showed that the new opening in the stomach was functioning normally with no retention at the six-hour study. The patient is now free of symptoms, has gained in weight, and is at work.

CASE 7. Gastric Ulcer Complicated with Malignant Change and Hemorrhage.—D. B., a woman thirty-two years old had epigastric distress for several years. Recently there had been a severe hemorrhage from the stomach. The application of the treatment for acute hemorrhage from peptic ulcer was given, and the bleeding stopped. The patient was subsequently examined and an ulcer was found in the lesser curvature of the stomach. There was no free hydrochloric acid in the stomach contents, a negative Wassermann, occult blood was present in the feces, and persistent pain while on accurate ulcer management. Operation was advised, a gastrotomy was done, and a tumor with two ulcers in the mucosa was removed from the posterior wall of the stomach.

Microscopic examination disclosed a sarco-leiomyoma of the round-celled and infiltrating type.

Comment.—According to the statistics of the Mayo Clinic, only one in two hundred gastric tumors is benign, and one in five hundred and fifty is a myoma. Persistent hemorrhage or occult blood in the stools, while the patient is accurately on ulcer management, is suspicious of malignancy.

CASE 8. Gastro-Enterostomy.—J. M., a man forty-nine years old, had a gastro-enterostomy in 1927 for relief of symptoms of many years duration. The patient was free from distress for only a short time. Then he began to have a recurrence of nausea, heartburn, belching, diarrhea, occult blood in the stool, and loss of weight. He was very irritable and nervous. Many ulcerated teeth had been removed.

Roentgenologic study disclosed a jejunal ulcer at the stoma which was painful under pressure. The distal portion of the stomach and duodenum appeared to be normal in outline and function. He was placed on medical treatment for nonobstructive type of ulcer, and was quite free of his symptoms most of the time.

However, there were periods of belching, sour stomach, and soreness in the region of the stoma. Two to five per cent of patients who have had gastro-enterostomy have a complication of a gastrojejunal or jejunal ulcer. If medical treatment does not affect a cure, the procedure of choice is to take down the gastro-enterostomy and close the stoma, providing, of course, that the pylorus is patent, and there is no evidence of chronic ulcer or obstruction at the outlet of the stomach. Due to mental disturbances, the patient here reported committed suicide three months after

he was placed on ulcer management, and necropsy revealed the jejunal ulcer in a subacute condition and in the process of healing.

Peptic Ulcer Complicated with Diverticula of the Duodenum.—The association of ulcer with diverticula of the duodenum is emphasized in many case reports. These may be congenital or acquired, they may be clinically silent, or may be the site of major pathology. Diverticula of the duodenum are found chiefly in the latter half of life, are acquired, and are often produced by the contracting scar of ulcer.

CASE 9. E. A., a woman aged seventy-two, complained of periods of heartburn, sour stomach, vomiting, and constipation during the previous twelve years. These attacks appeared regularly two to three hours after meals and were completely relieved by vomiting. There was frequently epigastric distress after midnight which was relieved by soda and vomiting of sour material.

The important points of the examination were a hyperchlorhydria tenderness and soreness in the epigastrium, constipation, and a paroxysmal auricular fibrillation.

Roentgenologic study showed a niche of the lesser curvature of the stomach, which was near the pylorus. The six-hour observation revealed a diverticulum of the second portion of the duodenum and one of the third portion. The former was tender under pressure.

The patient was placed on ulcer management for several months. Subsequent study and observation revealed the patient to be free of symptoms with absence of pain and vomiting, and enjoying good health. The heart condition was successfully treated with quinidin sulphate.

CONCLUSIONS

1. The symptoms of ulcer are completely controlled and relieved in uncomplicated ulcer.
2. Alkalosis is not likely to occur with the use of the insoluble alkalis.
3. Pyloric obstruction is influenced in the manner previously described.
4. Hemorrhage ceases and occult blood rapidly disappears from the stool and does not recur while on accurate management.
5. Gastro-enterostomy is the procedure of choice to relieve complete pyloric obstruction.
6. Medical management should follow surgical treatment for peptic ulcer.

1052 West Sixth Street.

DISCUSSION

FREDERICK A. SPEIK, M. D. (800 Auditorium Building, Los Angeles).—Although gastro-duodenal ulcers heal under proper medical treatment, we must be constantly on the alert for associated pathology. Intelligent observation, with frequent x-ray examinations, finds that the biggest and deepest ulcers gradually get smaller until they disappear, and the patient is symptom free. However, many cases in which lesions of the portal lymphatic system exist may have a return of symptoms or a recurrence of ulcer, because these lesions are foci of infection in the gall bladder or appendix.

Sippy stated that in order to treat peptic ulcer intelligently it is necessary to determine the age, the type, the location and complication of ulcer. It is

necessary to go further and determine if there are any lesions of the portal system, such as cholecystitis, appendicitis, pancreatitis, hepatitis, or peritoneal adhesions.

The taking out of an acute or chronic appendix does not cure the ulcer. Many appendectomies are done before an ulcer was discovered. This is one reason why patients do not always get well following an appendectomy. There is pathology elsewhere.

Patients with foci of infection in the portal lymphatic system should have them removed at earliest recognition. If physicians are on the alert for associated ulcer pathology, the diagnosis will be made more promptly and better end results will be had.

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HENRY SNURE, M. D. (1501 South Figueroa Street, Los Angeles).—The use of the roentgen ray in the management of peptic ulcer has been well covered in this presentation for each type of ulceration.

Another important condition, dealing perhaps more with the diagnosis of peptic ulcer than the management of same, has not been mentioned, namely, duodenitis. It should be considered before Case 1, as some investigators, Konjetzny, for instance, believe that it is the forerunner of peptic ulcer. On the other hand, Judd believes it to be a separate pathologic entity. The symptomatology of duodenitis is practically the same as that outlined for peptic ulcer in Doctor Lanphere's report; however, if the duodenum is opened and the mucous membrane inspected, no distinct ulcer is visualized. The mucous membrane presents a fine stippling, congestion and edema, usually over a small area; bleeding occurs easily on handling. The serosa is seldom thickened; occasionally small scar formation has been noted. Roentgenologically, the duodenal cap is small, difficult to fill and properly outline, and "writhing" is present. Also there is no constant niche present and no retention of barium meal in the stomach.

I would like to emphasize the point made by Doctor Speik, of the need of frequent examination to check up on the efficacy of the treatment and to aid in the search for associated pathology, particularly when the patient does not respond in the usual manner to ulcer management as outlined in the author's paper.

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PAUL B. ROEN, M. D. (1680 North Vine Street, Hollywood).—Inasmuch as the exact cause of peptic ulcer is as yet undetermined, the management of the treatment must be directed toward relief of the symptoms, and of other pathology, if found present, as has been indicated by Doctor Lanphere in his paper.

Peptic ulcers are very frequently associated with other pathology, particularly of the nasal sinuses, the teeth, the gums, and the tonsils, as well as the gastrointestinal tract. The symptom complex may be due to irritative lesions of the gastro-intestinal tract producing deformity of the duodenal cap, or may be entirely functional. Either one or any combination of these factors may be present in the same patient, rendering a positive diagnosis almost impossible.

Regardless of the exact pathology, a percentage of patients with this hyperacid syndrome so characteristic of ulcer will recover on mental and physical rest treatment, combined with a bland diet and proper alkaline medication at frequent intervals.

The results of treatment frequently prove or disprove the diagnosis. If the treatment does not produce the desired relief, or should there be a recurrence of the symptoms, a further and more intensive study is indicated, to be followed in turn by appropriate treatment.

INJURIES OF THE UROGENITAL TRACT*

REPORT OF CASES

By BURNETT W. WRIGHT, M. D.
Los Angeles

DISCUSSION by Philip Stephens, M. D., Los Angeles; E. H. Crabtree, M. D., San Diego; Charles P. Mathé, M. D., San Francisco.

THE task of the urologist engaged in examining industrial accident cases is not always an easy one. He is rarely privileged to see these patients immediately after injury, when external, visible evidence of trauma is so often present, or when the immediate signs and symptoms of injury are in evidence to aid him in making a diagnosis. Aside from the exceptional, severely injured patient who requires immediate hospitalization, most of his industrial patients are seen in his office, days and often weeks after an alleged injury, with urinary complaints which only the patient himself, in most instances, attributes to his accident. He has nearly always received some treatment at the hands of others.

PROBLEMS CONFRONTING THE UROLOGIST

When, still complaining, he comes to the urologist, he brings two distinct problems: (1) Is pathology present in the urogenital tract or not? and (2) If present, did it exist prior to the injury or develop as the result of injury or occur subsequent to and entirely independent of the injury.

The patient's story cannot always be relied on. Some willfully and skillfully misrepresent the facts; others are entirely honest in the belief that the symptoms date from the injury, when it may later be proved that there was preëxisting pathology and that the condition was either aggravated by the injury or that the patient's attention, for the first time, was called to symptoms which he previously ignored.

The reports of the surgeons who first examined him or later treated him are of necessity often incomplete from a urological standpoint, because these men do not generally employ the diagnostic procedures used by the urologist, or possess the special equipment necessary for these examinations. To see blood being ejected from the orifice of a ureter, following injury, for example, is infinitely more valuable than to read or to be told that there was blood in the voided urine shortly after the accident. The task of fixing the degree to which trauma is a factor in this class of cases rests largely with the urologist therefore, for usually his information is based on the only urological examination made in a given case.

In suspected cases of injury to the upper urinary tract, seen remotely after the accident, usually nothing short of a complete urological study will suffice. This includes a plain x-ray of the kidneys, ureters and bladder, examination of voided urine, test for residual urine, cystoscopy,

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